

EXHIBIT 1039

**UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C.**

**Before the Honorable Dee Lord
Administrative Law Judge**

In the Matter of

**CERTAIN TELEVISION SETS, TELEVISION
RECEIVERS, TELEVISION TUNERS, AND
COMPONENTS THEREOF**

Investigation No. 337-TA-910

**PRE-TRIAL BRIEF OF
THE OFFICE OF UNFAIR IMPORT INVESTIGATIONS**

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PRE-TRIAL BRIEF OF THE OFFICE OF UNFAIR IMPORT INVESTIGATIONS

Pursuant to Ground Rule 8.2 and Order No. 7 setting the procedural schedule, the Office of Unfair Import Investigations (“OUII” or “Staff”) hereby submits its pre-trial brief. Pursuant to the Notice of Institution, OUII is participating fully in the investigation. 79 Fed. Reg. 12526-27 (Mar. 5, 2014). The record evidence is expected to show that there is no violation of Section 337. Should a violation of Section 337 be found, the record evidence is expected to show that the appropriate remedy is a limited exclusion order as to each of the Respondents, but not cease and desist orders. Evidence on the public interest factors is expected to show that any limited exclusion should be tailored and its effective date delayed to protect the public interest. Should a violation be found, the record evidence is expected to show that there should be a bond set during the Presidential Review Period for the accused tuners, but no bond should be set for the accused televisions.

I. INTRODUCTION

A. Procedural History

This investigation is based on a Complaint filed by Cresta Technology Corporation (“Cresta” or “Complainant”) on January 28, 2014 under Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. §1337, naming Silicon Laboratories Inc. (“Silicon Labs”); Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. (collectively, “Samsung”); LG Electronics Inc., LG Electronics U.S.A., Inc. (collectively, “LG”); MaxLinear Inc. (“MaxLinear”); Sharp Corporation, Sharp Electronics Corporation (collectively, “Sharp”); and VIZIO, Inc. (“VIZIO”) as respondents. The Complaint alleged violations of Section 337 based on the importation, sale for importation, and/or sale within the United States after importation of certain television receivers and televisions alleged to infringe certain claims of U.S. Patent Nos.

7,075,585 (“the ’585 patent”) and 7,265,792 (“the ’792 patent”).¹ The Notice of Investigation was published on March 5, 2014.²

Cresta moved to amend the Complaint to add VIZIO’s original design manufacturers as respondents on April 21, 2014.³ The Administrative Law Judge (ALJ) issued an Initial Determination granting Cresta’s motion to amend on May 16, 2014,⁴ and the Commission determined not to review the ID on June 9, 2014. Cresta filed the Amended Complaint on June 12, 2014. The Respondents added by the Amended Complaint are SIO International, Inc. and Hon Hai Precision Industry Co., Ltd. (collectively, “SIO”); Top Victory Investments, Ltd. and TPV International (USA), Inc. (collectively, “TPV”); and Wistron Corporation and Wistron Infocomm Technology (America) (collectively, “Wistron”) (all collectively along with respondents identified above, “Respondents”).

On November 3, 2014, the ALJ issued an Initial Determination⁵ granting in part Samsung and VIZIO’s Motion for Summary Determination of Non-infringement⁶ as to VIZIO’s NXP tuner products and as to Samsung’s NXP tuner products, except as to importation. As of this time, the MaxLinear Respondents’ Motion for Summary Determination of Invalidity and Noninfringement,⁷ relating to the signal processor limitations and filed October 2, 2014, remains

¹ An unopposed motion to terminate the investigation with regard to a third originally asserted patent and certain claims of the ’585 and ’792 patents is pending. Mot. Dkt. No. 910-052.

² 79 Fed. Reg. 12526-27.

³ Mot. Dkt. No. 910-004.

⁴ Order No. 12.

⁵ Order No. 46.

⁶ Mot. Dkt. No. 910-041.

⁷ Mot. Dkt. No. 910-043.

pending. All other motions for summary determination have been denied.⁸

B. Parties

1. Complainant

Complainant Cresta Technology Corporation (“Cresta” or “Complainant”) is a Delaware corporation with a principle place of business at 3900 Freedom Circle, Suite 201, Santa Clara, California 95054. Complaint at ¶ 10. Complainant is in the business of developing and selling integrated circuits for receiving television signals. Complaint at ¶¶ 12-16. In 2011, Complainant purchased certain assets of Xceive Corporation relating to the technology of the Asserted Patents and Complainant’s domestic industry products. *Id.*

2. Respondents

a. Silicon Labs

Respondent Silicon Labs is a Delaware corporation with a principal place of business at 400 West Cesar Chavez St., Austin, Texas 78701.

b. MaxLinear

Respondent MaxLinear is a Delaware corporation with a principal place of business at 5966 La Place Court, Carlsbad, California 92008.

c. Samsung

Samsung Electronics America, Inc. is a New York corporation, with its principal place of business located at 85 Challenger Road, Ridgefield Park, New Jersey 07660. Samsung Electronics America, Inc. is a subsidiary of Respondent Samsung Electronics Co., Ltd.

d. LG

LG Electronics U.S.A., Inc. is a Delaware corporation, with its principal place of

⁸ Order Nos. 41, 44, 45, & 47.

business located at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey 07632. LG Electronics U.S.A., Inc. is a wholly owned subsidiary of Respondent LG Electronics, Inc.

e. Sharp

Sharp Corporation is corporation organized under the laws of Japan, with its principal place of business at 22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan. Respondent Sharp Electronics Corporation is New York corporation, and has its principal place of business at 1 Sharp Plaza, Mahwah, New Jersey, 07495-1163.

f. VIZIO

VIZIO is a California corporation, with its principal place of business located at 39 Tesla, Irvine, California 92618.

g. SIO/Hon Hai

SIO International Inc. is a California corporation, with a place of business located at 105 S. Puente Street, Brea, California, 92821. SIO International Inc. is a wholly-owned holding company for Respondent Hon Hai Precision Industry Company, Ltd. Hon Hai is a Taiwanese company with a place of business at No. 2, Tze Yu Street, Tu-Cheng District, New Taipei City, Taiwan.

h. TPV

Respondent Top Victory Investments Ltd. is a Hong Kong company with its principal place of business at Room 2108, 21st Floor, Harcourt House, 39 Gloucester Road, Wanchai, Hong Kong. Top Victory Investments Limited is a subsidiary of TPV Technology Ltd. Respondent TPV International (USA), Inc. is a California corporation with its principal place of business at 3737 Executive Center Drive, Austin, Texas, 78731. TPV International (USA), Inc. is also a subsidiary of TPV Technology Ltd.

i. Wistron

PRE-TRIAL BRIEF OF THE OFFICE OF UNFAIR IMPORT INVESTIGATIONS

Wistron Corp. is a Taiwan corporation with its principal place of business at 21F, 88, Sec. 1, Hsin Tai Wu. Rd., Hsichih, Taipei Hsien 221, Taiwan. Wistron Infocomm Technology (America) Corporation is a Texas corporation with its principal place of business at 800 Parker Square, Suite 285A, Flower Mound, Texas 75028. Wistron Infocomm Technology (America) Corporation is a wholly owned subsidiary of Wistron Corp.

C. Overview of the Technology

The technology at issue in this investigation relates to radio frequency receivers, with some of the claims being limited to television receivers. The evidence will show that allegedly infringing tuner integrated circuits are designed by Silicon Labs and MaxLinear and incorporated in the allegedly infringing televisions of the other Respondents prior to their importation into the United States and subsequent sale.

D. Overview of the Asserted Patents

Complainant's asserted patents are United States Patent Nos. 7,075,585 (JX-1, "the '585 patent") and 7,265,792 (JX-2, "the '792 patent") (collectively, the "Asserted Patents").

The '585 patent, entitled "Broadband receiver having a multistandard channel filter," was filed on September 6, 2002 and claims priority to U.S. Provisional Application No. 60/322,548 ("the '548 provisional"), filed September 17, 2001. The '585 patent issued July 11, 2006.⁹

The '792 patent, entitled "Television receiver for digital and analog television signals," was filed on July 1, 2004. The '792 patent issued September 4, 2007.¹⁰

E. Products at Issue

The Accused Products are (1) Silicon Labs tuners and television incorporating them

⁹ JX-1 ('585 patent).

¹⁰ JX-2 ('792 patent).

(including Samsung, LG, VIZIO, and TPV televisions) and (2) MaxLinear tuners and televisions incorporating them (including Samsung, Sharp, VIZIO, TPV, SIO, and Wistron televisions).

The specific accused model numbers for each Respondent are listed in Respondents' Prehearing Brief at pages 12-33.

Complainant relies on the following Domestic Industry Products to establish a domestic industry: XC5000A series, XC5000C series, CTC70x series, and CTC71x series.¹¹

II. JURISDICTION

The Complaint states a cause of action under Section 337 of the Tariff Act of 1930. As such, the Commission has subject matter jurisdiction over this investigation. *See Amgen, Inc. v. U.S. Int'l Trade Comm'n*, 902 F.2d 1532, 1536 (Fed. Cir. 1990). The Commission has *in rem* jurisdiction over accused products imported into the United States. *See Sealed Air Corp. v. U.S. Int'l Trade Comm'n*, 902 F.2d 976, 985-86 (C.C.P.A. 1981). There is no dispute that the Accused Products are imported into the United States. Respondents responded to the Complaint and participated in this investigation, thereby submitting to the personal jurisdiction of the Commission.

However, Respondents have asserted that Complainant lacks all substantial rights in the patents—necessary to maintain prudential standing—because of the provisions of several agreements granting security interests in the asserted patents as collateral for loans. *See RPreHB* at 34-39. OUII believes this to be a close question that will turn on the testimony of several witnesses expected to testify at the hearing in this investigation and therefore reserves its position on this issue until it has had an opportunity to consider that testimony.

¹¹ CPreHB at 19.

III. CLAIM CONSTRUCTION

A. Legal Standard

Claim construction is a matter of law. *Markman v. Westview Instruments Inc.*, 52 F.3d 969, 976 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370, 116 S. Ct. 1384 (1996). “When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.” *O2 Micro Int’l Limited v. Beyond Innovation Technology Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008). The ordinary and customary meaning of the language of a claim to one of ordinary skill in the art at the time of the invention is the starting point for the analysis. *Phillips v. A.W.H. Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). Every term in a claim is presumed to have meaning and any construction that would render a claim term superfluous is discouraged. *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1119 (Fed. Cir. 2004) (“While not an absolute rule, all claim terms are presumed to have meaning in a claim.”); *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1115 (Fed. Cir. 2002) (“An alternative construction would render the first monitoring term meaningless. That construction is therefore improper; this court will not rewrite claims.”). In short, “[t]he claims themselves provide substantial guidance as to the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314; *ACTV, Inc. v. The Walt Disney Co.*, 346 F.3d 1082, 1088 (Fed. Cir. 2003) (“the context of the surrounding words of the claim also must be considered in determining the ordinary and customary meaning of those terms”).

The ordinary meaning of a claim term as understood by a person of ordinary skill in the art may, in some circumstances, be readily apparent to laymen. *Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001). However, “the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but

in the context of the entire patent, including the specification.” *Phillips*, 415 F.3d at 1313. In construing the claims, the court should also consider the specification and “the patent’s prosecution history, if it is in evidence.” *Markman*, 52 F.3d at 976, 980.

The specification may act as a dictionary, explaining the invention and defining the terms used in the claims, and a patentee may act as his or her own lexicographer by clearly giving special definition to words in the specification. *Markman*, 52 F.3d at 1316; *Vitronics v. Conceptronic*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996). But, the specification (and prosecution history) should not “enlarge, diminish or vary” the limitations of the claims. *Vitronics*, 90 F.3d at 1582-83; *Markman*, 52 F.3d at 979–80; *Intel Corp. v. U.S. Int’l Trade Comm’n*, 946 F.2d 821, 836 (Fed. Cir. 1991) (“Where a specification does not require a limitation, that limitation should not be read from the specification into the claims.”).

In addition, the prosecution history “provides evidence of how the PTO and the inventor understood the patent.” *Phillips*, 415 F.3d at 1317. As such, “it may inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Id.*; *Vitronics*, 90 F.3d at 1582-83; *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (“The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.”).

Extrinsic evidence may also be considered, if needed, to assist in determining the meaning or scope of technical terms in the claims. *Phillips*, 415 F.3d at 1317-18. Expert testimony may be useful to “provide background on the technology at issue, to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the

patent or the prior art has a particular meaning in the pertinent field.” *Phillips*, 415 F.3d at 1318. However, it remains the intrinsic record, including the specification and prosecution history, which is the most significant evidence and thus determinative for interpreting the legally operative meaning of patent claim language. *Id.* at 1317. Indeed, “[e]xpert testimony at odds with the intrinsic evidence must be disregarded.” *Network Commerce, Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1361 (Fed. Cir. 2005) (holding that unsupported conclusions concerning patent claims provide little support for suggested claim construction).

B. Level of Ordinary Skill and Field of the Invention

Although there is some disagreement between the parties’ experts on the level of ordinary skill in the art, OUII believes the definitions to be reasonably close.

- Complainant’s expert will testify¹² that a person of ordinary skill in the art (POSITA) would have:
 - (1) a Bachelor of Science degree in Electrical Engineering (BSEE) or a closely related field and at least two years of professional experience in implementing radio frequency (RF) circuits for television applications;
 - or (2) a BSEE (or a closely related field) and four years of professional experience in RF integrated circuit (IC) design that is not specific to the field of televisions;
 - or (3) a Master of Science in Electrical Engineering (MSEE) or a closely related field and two years of professional experience in RF IC design that is not specific to televisions.
- The Silicon Labs Respondents’ expert will testify¹³ that a POSITA would have:
 - (1) a BSEE (or equivalent) and two to four years of industry experience in RF receiver and signal processing design;
 - or (2) a MSEE (or equivalent) and two years of experience in RF receiver and signal processing design;
 - or (3) a MSEE with a concentration in RF receiver and signal processing design.

¹² CPreHB at 22.

¹³ RPreHB at 33.

- The MaxLinear Respondents’ experts will testify¹⁴ that a POSITA would have:
 - (1) a MSEE and four years of experience designing or researching wireless communication receivers and RF IC receivers;
 - or (2) additional education in lieu of experience or vice versa.

Based on this testimony and the intrinsic evidence, OUII believes that a POSITA would have: (1) a BSEE or equivalent and four years of experience in the design of radio frequency receivers and/or radio frequency signal processing circuits; or (2) a MSEE or equivalent and two years of experience in the design of radio frequency receivers and/or radio frequency signal processing circuits. Further education or a more specialized advanced degree could substitute for experience and vice versa.

The private parties also dispute the field of art. Complainant argues that the field of art for the asserted patents is television tuners and receivers.¹⁵ Respondents argue that the field of art is radio frequency receiver and signal processing design.¹⁶ Complainant’s argument is undercut by its own proposed definition of a POSITA, which is not limited to persons with experience in radio frequency circuits for televisions. Respondents’ proposed definition of the field of art comports with OUII’s definition of a POSITA. OUII therefore supports the Respondents’ definition of the field of the art.

C. Construction of Disputed Terms for the ’585 and ’792 Patents¹⁷

1. “receiver”¹⁸

¹⁴ RPreHB at 33.

¹⁵ CPreHB at 21.

¹⁶ RPreHB at 34.

¹⁷ Complainant’s and Respondents’ prehearing briefs follow a similar but not identical order in their presentation of arguments regarding disputed claim terms. OUII presents the terms in the same order as Respondents’ brief because this was the order used by the parties during previous meet-and-confer discussion regarding claim construction.

Complainant's Proposed Construction	Respondents' Proposed Construction	Staff's Proposed Construction
television receiver	<i>preamble not limiting</i>	<i>preamble not limiting</i>

A preamble generally does not limit the claims unless “it recites essential structure or steps” or otherwise is necessary to breathe life into the claim. *See Am. Medical Sys., Inc. v. Biolitec, Inc.*, 618 F.3d 1354, 1358-59 (Fed. Cir. 2010) (summarizing and quoting from various precedents). In claim 1, the term receiver “‘merely gives a descriptive name to the set of limitations in the body of the claim.’” *Id.* (quoting *IMS Tech., Inc. v Haas Automation, Inc.*, 206 F.3d 1422, 1434-35 (Fed. Cir. 2000)). Because “receiver” does not limit the claim, it should not be construed.

If it need be construed, the term “receiver” is generic.¹⁹ The term “receiver” should not be limited by the preferred embodiment television receivers as argued by Complainant. *See Johnson Worldwide Assoc., Inc. v. Zebco Corp.*, 175 F.3d 985, 992 (Fed. Cir. 1999) (declining to narrowly define “coupled” to mean “mechanically coupled”). Complainant argues that television receivers have unique design considerations and constraints,²⁰ but the ’585 patent generally described the invention at the level of block diagrams and does not provide teaching relevant to those unique considerations and constraints.²¹ Even the anti-aliasing filter 60, which is the lone block from Fig. 2 described at the level of a circuit diagram in the ’585 patent, is not described in

¹⁸ The claim term “receiver” appears in the preamble of claim 1 of the ’585 patent.

¹⁹ *See* RPreHB at 44.

²⁰ CPreHB at 30.

²¹ *See* JX-1 (’585 patent) at Fig. 2.

terms of either exemplary component values or performance characteristics like signal to noise ratio.²² Thus, the term “receiver” should not be construed as a television receiver.

2. “tuner”²³

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
circuit that converts television radio frequency input signals to signals at an intermediate frequency	circuitry that selects a bandwidth of radio frequency input signals and converts that band to a band of output signals at an intermediate frequency	circuit that selects a bandwidth of radio frequency input signals and converts that band to output signals at an intermediate frequency

There is only a slight difference between OUII’s proposed construction and that of the Respondents.²⁴ Staff’s and Respondents’ proposed constructions are supported by the ’585 patent specification. The Summary of the Invention states that “[t]he tuner receives input RF signals encoding information in one of a number of formats and converts the RF signals to intermediate signals having an intermediate frequency (IF).”²⁵ The input radio frequency (“RF”) signals are, for example, “received on an antenna or on a cable line.”²⁶ The necessity for selection of a bandwidth of radio frequency input signals is clear because, at any one time, only a particular portion (e.g., corresponding to a selected television channel) of the full RF spectrum received will be of interest. The selected bandwidth of the input RF signal is understood by

²² See *id.* at Figs. 3 & 4, col.4 ll.16-25.

²³ The claim term “tuner” appears in claim 1 of the ’585 patent.

²⁴ OUII has no objection to making explicit that the output signals (plural) exist in a band as recited in Respondents’ proposed construction because this was the intended understanding of OUII’s proposed construction. OUII also has no objection to the word “circuitry” in place of “circuit” for this construction.

²⁵ JX-1 (’585 patent) at col.2 ll.48-51.

²⁶ *Id.* at col.3 ll.46-51.

reference to the standard for the format in question.²⁷ In other words, the bandwidth will be defined relative to the transmission standard (*e.g.*, U.S. terrestrial analog television broadcast standard NTSC).

Conversion of the selected band of input RF signals to a band of output signals at an intermediate frequency is confirmed by the '585 patent's explanation that the "input RF signals are coupled to a tuner 54 which operates to convert the input RF signal to an intermediate signal."²⁸ Claim 1 itself states that the tuner "convert[s] said input RF signals to intermediate signals having an intermediate frequency (IF)."²⁹

Complainant's proposed construction is overly narrow in that it is limited to television input signals. However, nothing in the language of the tuner limitation of claim 1 of the '585 patent limits the tuner to the preferred embodiment, a television tuner. *See Johnson Worldwide*, 175 F.3d at 992. Complainant's construction is also insufficiently detailed in that it lacks reference to the selection performed by the tuner and to the particular bandwidth of signals in question.

3. "frequency conversion circuit"³⁰

Complainant's Proposed Construction	Respondents' Proposed Construction	Staff's Proposed Construction
Circuit that converts television radio frequency input signals to signals at an intermediate frequency	circuitry that converts a selected bandwidth of radio frequency input signals to a band of output signals at an intermediate frequency	circuit that converts a selected bandwidth of radio frequency input signals to output signals at an intermediate frequency

²⁷ *See, e.g., id.* at col.1 ll.27-39.

²⁸ *Id.* at col.3 ll.48-50.

²⁹ *Id.* at col.6 ll.53-55.

³⁰ The claim term "frequency conversion circuit" appears in claim 1 of the '792 patent.

There is only a slight difference between OUII's proposed construction and that of the Respondents.³¹ Staff's and Respondents' proposed constructions are supported by the '792 patent. With regard to Figure 1, the '792 patent states:

Frequency conversion circuit 110 receives input RF signals on signal input terminal 102. The input RF signals can be received from terrestrial broadcast or cable transmissions. Frequency conversion circuit 110 operates to convert the input RF signal to an intermediate frequency (IF) signal using one or more frequency conversions.³²

This description is consistent with the description of the tuner in the '585 patent. In fact, it appears that the inventors intended the two terms to be synonymous.³³ For this reason, OUII's proposed construction of "frequency conversion circuit" in the '792 patent is consistent with OUII's proposed construction of "tuner" in the '585 patent. OUII's proposed construction is also consistent with the surrounding claim language in claim 1 of the '792 patent.³⁴

Complainant's proposed construction is overly narrow and unnecessarily duplicative in that the limitation to television signals is not required by the language being construed but is contained in separate claim language.³⁵ Complainant's construction is also insufficiently detailed in that it lacks reference to the selection performed by the frequency conversion circuit and the particular bandwidth of signals in question.

³¹ OUII has no objection to making explicit that the output signals (plural) exist in in a band as recited in Respondents' proposed construction because this was the intended understanding of OUII's proposed construction. OUII also has no objection to the word "circuitry" in place of "circuit" for this construction.

³² *Id.* at col.4 ll.52-58.

³³ *See* JX-2 at col.3 l.20 ("a frequency conversion circuit (a tuner)"), col.4 l.50 ("a frequency conversion circuit 110 (or tuner circuit 110)").

³⁴ *See id.* at col.10 ll.52-56.

³⁵ *See id.* at col.10 ll.55-56 ("the input RF signal encoding information in one of a plurality of television signal formats").

4. “input RF signal(s)”³⁶

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
input RF television signal(s)	radio frequency input signal(s) [to circuits specified by other claim language]	radio frequency input signal(s) [to circuits specified by other claim language]

OUII and Respondents are in agreement as to the correct construction of the claim term “input RF signal(s).” Both the ’585 and ’792 patents make clear that “RF” stands for radio frequency.³⁷ Complainant’s proposed construction is overly narrow in that it limits the term to television signals. In some claims, that limitation may exist due to other claim language,³⁸ but it is not a limitation that should be imported into the construction of this claim term. The square-bracketed notation to OUII’s proposed construction, though correct, is a remnant from an earlier stage of the claim construction process and no longer needed for clarification.

5. “intermediate signals having an intermediate frequency”/“intermediate frequency signal having an intermediate frequency”³⁹

Complainant’s Proposed Construction	MaxLinear, VIZIO, Sharp, SIO, TPV, & Wistron’s Proposed Construction	SiLabs, Samsung, LG, TPV’s Proposed Construction	Staff’s Proposed Construction

³⁶ The claim terms “input RF signal(s)” appear in claims 1, 10, and 13 of the ’585 patent and claims 1, 8, and 26 of the ’792 patent.

³⁷ JX-1 (’585 patent) at col.1 l.5; JX-2 (’792 patent) at col.1 l.36.

³⁸ See, e.g., JX-2 (’792 patent) at col.10 ll.55-56

³⁹ The claim term “intermediate signals having an intermediate frequency” appears in claim 1 of the ’585 patent. The claim term “intermediate frequency signal having an intermediate frequency” appears in claim 1 of the ’792 patent.

intermediate signal - a signal that has been converted from RF but has not yet been demodulated	intermediate signals/intermediate frequency signal – signals having an intermediate frequency	'585 patent – the signals output by the tuner have a frequency above low-IF	intermediate signals/intermediate frequency signal – signals having an intermediate frequency
intermediate frequency – a frequency of any value other than the RF signal frequency	intermediate frequency – a carrier frequency that is different from (1) the transmission frequency of the selected input RF signal band and (2) the frequencies of the baseband signals	'792 patent – the signals output by the frequency conversion circuit have a frequency band above low-IF	intermediate frequency – a carrier frequency that is different from (1) the transmission frequency of the selected input RF signal band and (2) the frequencies of the baseband signals

OUII has defined these claim terms in two parts because OUII believes that the claim terms are partially self-defining. In other words, the defining characteristic of “intermediate signals” and an “intermediate frequency signal” is that they have an intermediate frequency. The MaxLinear Respondents agree with OUII’s proposed constructions for these claim terms.

OUII’s construction is consistent with the usage of the terms in the patent specifications. The '585 patent states that “[t]he input RF signals are coupled to a tuner 54 which operates to convert the input RF signal to an intermediate signal using one or more frequency conversions.” JX-1 ('585 patent) at col.3 ll.48-51. Similarly, the '792 patent states that “[f]requency conversion circuit 110 operates to convert the input RF signal to an intermediate frequency (IF) signal using one or more frequency conversions.” JX-2 ('792 patent) at col.4 ll.55-58. The '585 patent also states that “tuner 54 can be designed to generate intermediate signals having an intermediate frequency of any values. [sic]” JX-1 ('585 patent) at col.3 ll.60-62. Similarly, the '792 patent states that “[f]requency conversion circuit 110 provides the IF signal on a terminal 116 have [sic] a preselected intermediate frequency.” JX-2 ('792 patent) at col.4 l.67-col.5 l.2.

No defining characteristic other than the result of a conversion to an intermediate frequency is disclosed for “intermediate signals” or an “intermediate frequency signal” in either patent.

The term “intermediate frequency” (IF) is more difficult to construe because it is not explicitly defined by the asserted patents. The evidence will show that the best choice for a single representative “intermediate frequency” is the converted frequency of the carrier. As is clear from the portions of the patent specifications cited in the preceding paragraph, the intermediate frequency arises as a result of a frequency conversion. Thus, the intermediate frequency must first be a carrier frequency different from the transmission frequency of the selected input RF signals.

Furthermore, the asserted patents distinguish between IF signals and baseband signals. The ’585 patent states that conventional “[t]elevision receiver 10 includes . . . a demodulator 20 for converting the IF signal to video and audio baseband signals” and that, after converting an RF signal to an IF signal, “receiver 10 converts the IF signal to the baseband signals.” JX-1 (’585 patent) at col.2 ll.1-3, col.1 ll.51-54. Similarly, in the asserted claims the baseband signals are generated by demodulators based on output signals in turn generated from the intermediate signals. See *id.* at claim 1. In the ’792 patent, the baseband signals are also distinguished from the IF signal: “DSP 131 generates a processed IF signal on terminal 134 as the video baseband signal and a processed IF signal on terminal 135 as the audio baseband (or sound IF) signal.” JX-2 (’792 patent) at col.6 ll.33-36. The claims of the ’792 patent describe the baseband signals as outputs of either the signal output circuit or a separate demodulator circuit. See *id.* at claims 4 and 8. Therefore, the second portion of OUII’s construction distinguishing the frequency of the intermediate signal from the frequency band occupied by the baseband signals is also well supported by the specifications of the asserted patents.

Furthermore, Respondents’ experts are expected to provide extensive testimony in support of OUII’s construction of these terms explaining how a POSITA would view the ’585 and ’792 specifications in light of the state of the art.⁴⁰

6. “analog-to-digital converter”⁴¹

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
No construction – plain and ordinary meaning.	a component that produces periodic, discrete sample values for an analog input signal	a component that produces periodic, discrete sample values for an analog input signal

Complainant argues that “analog-to-digital” converter should be given its plain and ordinary meaning but does not provide that meaning or explain how Staff and Respondents’ proposed construction allegedly differs from the plain and ordinary meaning. Staff and Respondents agree on the proper construction of this claim term, and that construction is consistent with the description in the patents’ specifications. The ’585 patent states that the analog-to-digital converter (abbreviated ADC) “sample[s] and digitize[s]” “the intermediate signals.”⁴² Additionally, the ’585 patent states that “ADC 62 operates to sample the filtered intermediate signals to generate a digital representation thereof. In the present embodiment, ADC 62 is a 10-bit converter and has a sampling rate of up to 40 megasamples per second.”⁴³ The number of bits indicates the sampling resolution (i.e., the number of discrete output values)

⁴⁰ See, e.g., RX-1996C (Hashemi Rebuttal WS) at Q88-Q118; RX-1971C (Griffin Rebuttal WS) at Q88-Q118; see also RX-1677C (McNair WS) at Q92-Q100 (supporting Staff’s construction in part but arguing that it is too narrow with regard to excluding low-IF signals).

⁴¹ The claim term “analog-to-digital converter” appears in claim 1 of the ’585 patent and in claim 1 of the ’792 patent.

⁴² JX-1 (’585 patent) at col.4 ll.6, 19-20.

⁴³ *Id.* at col.4 ll.26-30.

of the ADC, and the sampling rate demonstrates that the sampling is periodic. The '792 patent states that "ADC 123 operates to digitize the analog IF signal and provide a digital IF signal," confirming that the inputs to an ADC are analog.⁴⁴ OUII and Respondents' proposed construction is also consistent with the plain and ordinary meaning provided by technical dictionaries.⁴⁵

7. "signal processor"⁴⁶

Complainant's Proposed Construction	MaxLinear's Proposed Construction	SiLabs, Samsung, LG, TPV, and VIZIO's Proposed Construction	Samsung's Proposed Construction	Staff's Proposed Construction
not a 35 U.S.C. § 112(f) term; circuitry that processes a television signal in the digital domain	The term, "signal processor," in claim 1 of the '585 patent and claim 1 of the '792 patent is properly construed under §112, paragraph f. <i>[continued in footnote]</i> ⁴⁷	"a signal processor" not a § 112(f) term; circuitry that processes a signal	"a signal processor" a single programmable digital signal processor with a single processing path for processing both analog and digital television signals	not a 35 U.S.C. § 112(f) term; circuitry that processes a signal

⁴⁴ JX-2 ('792 patent) at col.5 ll.18, 21-23.

⁴⁵ See RX-0546 at 21; see also RX-0621 at 25, RX-0547 at 35, RX-0623.

⁴⁶ The claim term "signal processor" appears in claim 1 of the '585 patent and in claim 1 of the '792 patent.

⁴⁷ Function: processing said/the digital representation of said/the intermediate signals in accordance with said/the format of said/the input RF signal, said/the signal processor generating two or more processed digital signals indicative of information encoded in said/the input RF signal

Corresponding structure in the specification: programmable digital signal processor (DSP)

If §112, paragraph f does not apply, then "signal processor" is a programmable digital signal processor (DSP)

The MaxLinear Respondents assert that this the term “signal processor” should be construed as a means-plus-function limitation. OUII disagrees. The preferred embodiment of the signal processor in the ’585 and ’792 patents is clearly a programmable digital signal processor,⁴⁸ but there are no disclaimers or other sufficiently limiting statements restricting the signal processor to the preferred embodiment. Thus, it should be given its plain and ordinary meaning, circuitry that processes a signal.

The claim term “signal processor” is presumed not to be a means-plus-function term. Claim language that does not use the word “means” is presumed not to invoke 35 U.S.C. §112 ¶ 6 (or 112(f)). *Inventio AG v. Thyssenkrupp Elevator Am. Corp.*, 649 F.3d 1350, 1356 (Fed. Cir. 2011). The “presumption can be overcome if the challenger demonstrates that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Id.* (internal quotations and citations omitted). The following language in the asserted claims recites the functions of the signal processors (in each

Since “signal processor for processing ... signals” fails to recite sufficiently definite structure, the term, “signal processor,” in claim 1 of the ’585 patent and claim 1 of the ’792 patent is properly construed under §112, paragraph f. (“a limitation lacking the term ‘means’ may overcome the presumption against means-plus-function treatment if it is shown that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Mass. Inst. of Tech. and Elecs. For Imaging, Inc. v. Abacus Software*, 462 F.3d 1344, 1353 (Fed. Cir. 2006)).

⁴⁸ JX-1 (’585 patent) at col.4 l.7 (“digital signal processor (DSP) 64”), ll.12-14 (“applying . . . the appropriate signal processing functions at the DSP circuit”), ll.53-54 (“DSP 64 processes the digital signals according to the television standard to which the input RF signal is encoded”), l.65 (“DSP 64 is a programmable and reconfigurable processor.”); JX-2 (’792 patent) at col.3 l.21 (“digital signal processor (DSP) circuit”), ll.50-51 (“digital signal processor circuit can be readily reconfigured”), col.4 l.51 (“digital signal processor (DSP) circuit 130”), col.5 l.64 (“DSP 131 is a programmable and reconfigurable processor.”).

claim), but there has not been a showing of insufficiently definite structure for a “signal processor” so as to overcome the presumption:

Claim 1 of the '585 patent (JX-1): “a signal processor for processing said digital representation of said intermediate signals in accordance with said format of said input RF signal, said signal processor generating digital output signals indicative of information encoded in said input RF signal”

Claim 1 of the '792 patent (JX-2): “a signal processor for processing the digital representation of the intermediate frequency signal in accordance with the television signal format of the input RF signal, the signal processor generating digital output signals indicative of information encoded in the input RF signal, wherein the signal processor applies one of a plurality of finite impulse response filters to the digital representation of the intermediate frequency signal, each of the plurality of finite impulse responses corresponding to a format of the input RF signal”

Complainant's and Samsung's proposed construction are incorrect because the signal processor in claim 1 of the '792 patent is already required to process television signals by the remaining claim language describing the signal processor that follows. Both constructions are also incorrect because the signal processor of claim 1 of the '585 patent is not required to process television signals by either the functional language that follows in the claim or the plain and ordinary meaning of the term signal processor. Similarly, the portion of Complainant's construction requiring processing “in the digital domain” is duplicative because the functional claim language for both claims already requires digital inputs (the “digital representation”) to the signal processor as well as digital outputs (“digital output signals”). Also, the portion of Samsung's proposed construction requiring a single processor for processing both analog and digital signals is inaccurate and partially duplicative in view of the separate claim language requiring that the signal processors must function in accordance with the format of the input RF signal. Finally, it is OUII's belief that use of the term “processing path” in Samsung's proposed construction is overly vague.

8. “said digital representation of said intermediate signals” / “said digital representation of said intermediate signal” / “the digital representation of the intermediate frequency signal”⁴⁹

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
No construction – plain and ordinary meaning	the digital samples as output by the analog-to-digital converter	the digital samples as output by the analog-to-digital converter

Respondents and OUII agree on the appropriate construction of these claim terms in accordance with the surrounding claim language and the appropriate construction of the term analog-to-digital converter. Complainant argues for plain and ordinary meaning, stating that OUII’s proposed construction is not useful. Complainant also describes the phrase “digital samples” as vague and overly limiting, but without any reasoning or explanation to back up the assertion. OUII believes the construction is necessary to clarify that the second claim phrase from dependent claim 10 of the ’585 patent (“said digital representation of said intermediate signal”) refers to the same “said” digital representation referenced in claim 1 (“said digital representation of said intermediate signals”) despite the fact that claim 10 uses the singular “signal” rather than the plural “signals” used in claim 1. Similarly, OUII believes it is necessary to clarify that the claim term from claim 1 of the ’792 patent (“the digital representation of the intermediate frequency signal”) refers to the output of the analog-to-digital converter despite having mistakenly used the word “the” rather than “said” with regard to the digital representation.

9. “in accordance with said format of said input RF signal” / “each of said plurality of finite impulse response corresponding to a format of

⁴⁹ The claim terms appear in claim 1 of the ’585 patent, claim 10 of the ’585 patent, and claim 1 of the ’792 patent, respectively.

said input RF signal” / “each of the plurality of finite impulse response corresponding to a format of the input RF signal”⁵⁰

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
“format” – one or more characteristics of the input RF signal corresponding to the television transmission standard	<p>“in accordance with said format” – differently for analog encoded signals and digitally encoded signals</p> <p>“each of said plurality of finite impulse response filters [sic] corresponding to a format of said input RF signal” – different FIR filters are applied for analog encoded signals as opposed to digitally encoded signals</p>	<p>Corresponding to the transmission standard that applies to the input RF signal</p> <p><i>Note that “finite impulse response filters” is construed separately below.</i></p>

OUII’s proposed construction of the claim terms best comports with the disclosure of the patent specifications and the context in which the language occurs in the claims. As argued by Respondents, many parts of the ’585 and ’792 patent specifications use the term “format” to refer to analog or digital formats and the term “standard” to refer to transmission standards.⁵¹ However, construing “format” is not as simple as that because the terms are not entirely distinct. For example, the transmission standards (e.g., NTSC or ATSC for television signals) are defined in terms of analog or digital transmissions (i.e., as used in the preceding sentence, a standard encompasses either a digital or analog transmission format).⁵² Also, in one instance,

⁵⁰ The claim terms appear in claim 1 of the ’585 patent, claim 10 of the ’585 patent, and claim 1 of the ’792 patent, respectively.

⁵¹ See, e.g., JX-1 (’585 patent) at col.4 ll.14-16 (“television signals in any format (analog or digital) and in any standard (NTSC, PAL or ATSC)”), JX-2 (’792 patent) at col.5 ll.27-29 (“television signals in any format (analog or digital) and in any standard (e.g.: NTSC, PAL, SECAM, DVB, or ATSC)”).

⁵² See JX-1 (’585 patent) at col.1 ll.29-36 (“For analog television transmission, the NTSC (National Television Standards Committee) standard, the PAL (Phase Alternate Lines)

DVB and ATSC for digital transmission are described as “format[s]” in the patents.⁵³ Thus, the distinction between “format” and “standard” in the patents is not as clear cut as suggested by Respondents.

For this reason, OUII believes it is critical to examine the claim language surrounding the disputed terms. Claim 1 of the ’585 patent requires “a signal processor for processing . . . in accordance with said format of said input RF signal, said signal processor generating digital output signals indicative of *information encoded* in said RF signal.”⁵⁴ Claim 1 of the ’792 patent includes very nearly the same language: “a signal processor for processing . . . in accordance with the television signal format of the input RF signal, the signal processor generating digital output signals indicative of *information encoded* in the RF signal.”⁵⁵ In order to provide signals indicative of information encoded in the signal being processed, the processing of the signal processor and selection of the finite impulse response filter must be in accordance with not only the analog or digital nature of the encoded information, but in accordance with all other relevant characteristics of the encoded information as specified by the relevant transmission standard. This understanding is also consistent with the patents’ description of the preferred embodiment signal processor receiving an input identifying the transmission standard

standard, and the SECAM (Sequential Couleur Avec Memoire) standard are widely adopted. On the other hand, for digital television transmission, the DVB (Digital Video Broadcast) format and the ATSC (Advanced Television Standards Committee) format are available.”), JX-2 (’792 patent) at col.11l.20-27 (same).

⁵³ Id.

⁵⁴ JX-1 (’585 patent) at col.6 l.65-col.7 l.2 (emphasis added).

⁵⁵ JX-2 (’792 patent) at col.10 ll.60-65 (emphasis added).

for the input RF signal and using information about the transmission standard to select a finite impulse response.⁵⁶

For these reasons, Respondents construction is too broad. Knowing whether the signal is for digital or analog television is insufficient. There are other aspects of the transmission standard that define the way that information is encoded that must be understood in order to provide signals indicative of the information encoded in the signal. For similar reasons, Complainant's construction is also too broad. Complainant's proposed construction suggests that processing and selection in accordance with any one characteristic of the signal is sufficient, whereas the signal process must take account of *all* relevant characteristics of the transmission standard in order to act in accordance with the information encoded in the signal as required by the claims.

10. “video and audio baseband signals” / “video baseband signal” / “audio baseband signal”⁵⁷

Complainant's Proposed Construction	Respondents' Proposed Construction	Staff's Proposed Construction
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⁵⁶ JX-1 ('585 patent) at col.4 ll.55-60 (“In the present embodiment, channel filter 58 includes a standard selection circuit 68 for selecting between the several analog television standards and the several digital television standards. DSP 64 applies the appropriate filter function, such as an impulse response, to the digital signals depending on the state of the standard selection circuit 68.”), Fig. 2; JX-2 ('792 patent) at col.5 ll.56-59 (“DSP 131 applies the appropriate filter function, such as an impulse response, to the digital IF signals received on terminal 124 depending on the state of format/standard selection circuit 133.”), Fig. 1.

⁵⁷ The term “video and audio baseband signals” appears in claim 1 of the '585 patent and claim 8 of the '792 patent. The terms “video baseband signal” and “audio baseband signal” appear in claim 4 of the '792 patent.

baseband signal – television signal that has had its transmission modulation removed but has not been decoded or encoded (e.g., CVBS, SIF, MPEG data stream) add “video,” “audio,” or “video and audio” for variations	encoded but unmodulated video or audio data signals	encoded but unmodulated video or audio data signals
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OUII and Respondents agree on the correct construction. OUII’s proposed construction is supported by the patent specifications. The baseband signals comprise encoded data signals: “The baseband signals are coupled to appropriate video and audio decoders to generate display signals (e.g. RGB) or sound.”⁵⁸ Likewise, the baseband signals are unmodulated: “Television receiver 10 includes a channel filter 18 and a demodulator 20 for converting the IF signal to video and audio baseband signals.”⁵⁹ As a corollary, baseband signals would also exist on the transmission side after encoding but prior to modulation.

Complainant’s proposed construction injects uncertainty by using the unexplained term “transmission modulation,” suggesting without support that the baseband signals could have some form of non-transmission modulation. Also, as noted, baseband signals also exist prior to transmission, so Complainant’s construction is inappropriately restricted to a receiver-side view. Finally, the prohibition on encoding in Complainant’s construction is contrary to the teaching of the patents that the baseband signals are input to decoders.

⁵⁸ JX-1 (’585 patent) at col.1 ll.54-56; see also JX-2 (’792 patent) at col.1 ll.40-42.

⁵⁹ JX-1 (’585 patent) at col.2 ll.1-3; see also JX-2 (’792 patent) at col.1 ll.52-54.

11. “plurality of formats” / “format”⁶⁰

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
one or more characteristics of the input RF signal corresponding to the television transmission standard	<p>“format” - the analog or digital encoding of a signal</p> <p>“plurality of formats” - the types of analog and digital encodings supported by the receiver</p> <p>“television signal format” - analog or digital encoding of a television signal</p> <p>“plurality of television signal formats” - the types of analog and digital television encodings supported by the television receiver</p>	“format” - transmission standard corresponding to the input RF signal

OUII’s proposed construction for the term “format” is consistent with its proposed constructions for the longer claim terms discussed in section III.C.9 above. The same reasoning therefore applies equally here.

12. “analog format”⁶¹

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
No construction – plain and ordinary meaning	signal output from said digital-to-analog converter is an analog signal	signal output from said digital-to-analog converter is an analog signal

⁶⁰ In addition to being part of the terms discussed above in part III.C.9, “plurality of formats” appears in claim 1 of the ’585 patent, “format of said input RF signal” appears in claim 13 of ’585 patent, “plurality of television signal formats” appears in claim 1 of the ’792 patent, “television signal format of the input RF signal” appears in claim 8 of the ’792 patent, and “format of the input RF signal” appears in claim 26 of the ’792 patent.

⁶¹ The claim term “analog format” appears in claim 3 of the ’585 patent.

Respondents and OUII agree on the meaning of this term and simply seek to clarify that “analog format” is used here simply to refer to an analog signal. The clarification is necessary as the term “format” is used elsewhere in the claims, as discussed above, with different intent.

13. “real part of said finite impulse response filter operation” / “real part of the finite impulse response filter operation”⁶²

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
the real part of the weighted sum output, calculated using complex numbers for the weights or signal samples or both	the real part of the weighted sum output, calculated using complex numbers for the weights	the real part of the weighted sum output, calculated using complex numbers for the weights

14. “imaginary part of said finite impulse response filter operation” / “imaginary part of the finite impulse response filter operation”⁶³

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
the imaginary part of the weighted sum output, calculated using complex numbers for the weights or signal samples or both	the imaginary part of the weighted sum output, calculated using complex numbers for the weights	the imaginary part of the weighted sum output, calculated using complex numbers for the weights

All parties agree on a portion of the construction for these claim terms, but Complainant’s construction allows for the “real part” and the “imaginary” part of the finite impulse response (FIR) filter operation to arise from complex numbers for the signal samples and real numbers for the weights. Complainant’s proposed construction is contrary to the language of the claim terms themselves which refer to parts of the filter operation—not to the

⁶² These claim terms appear in claim 12 of the ’585 patent and claim 25 of the ’792 patent, respectively.

⁶³ These claim terms appear in claim 12 of the ’585 patent and claim 25 of the ’792 patent, respectively.

filter’s operation on parts of the input signals. There is only one short description in the patent specifications with regard to these related claim terms. The ’585 patent (similar language in the ’792 patent) states that “DSP 64 includes two computing units to speed up the computation time. Specifically, the filtering operations of the real and imaginary parts in the frequency domain are carried out in parallel.”⁶⁴ There is no reference to complex numbers or imaginary numbers prior to this description. For example, there is no description that the ADC uses complex numbers for its output, and there is no description of separate in-phase and quadrature processing paths. Thus, both the plain language of the claims themselves and the patent specifications teach that the complex nature (real and imaginary parts) of the FIR filter operation arises from the application of weights for the filter with complex values and not from the processing of complex signal samples.

15. “anti-aliasing filter”⁶⁵

Complainant’s Proposed Construction	Respondents’ Proposed Construction	Staff’s Proposed Construction
a circuit that filters the intermediate signals to prevent aliasing from occurring during sampling	band-pass filter	band-pass filter

Staff and the Respondents agree on the correct construction of “anti-aliasing filter.” The evidence will show that all of the examples of an anti-aliasing filter⁶⁶ in the ’585 patent are band-pass filters. In addition, the ’585 patent repeatedly refers to the “center frequency” of the anti-aliasing filter—not to a center frequency of one embodiment of the anti-aliasing filter—in both

⁶⁴ JX-1 (’585 patent) at col.5 ll.2-5; see also JX-2 (’792 patent) at col.6 ll.1-4.

⁶⁵ The claim term “anti-aliasing filter” appears in claim 1 of the ’585 patent.

⁶⁶ JX-1 (’585 patent) at col.4 ll.20-25 (describing a SAW filter and the Fig. 2 & 3 circuits as alternate embodiments of the anti-aliasing filter).

the specifications and the claims.⁶⁷ Only band-pass filters have a center frequency because they have both the upper and lower cutoff frequencies needed to define a center frequency. A low-pass filter has only an upper cutoff frequency and thus no symmetric point of reference to define a center. There are no references to low-pass filters in the '585 patent, and there are no examples of anti-aliasing filters that are not band-pass filters.

Because the '585 patent defines a center frequency as a characteristic of the anti-aliasing filter and not as a characteristic of one type of anti-aliasing filter, the construction of “anti-aliasing filter” must be limited to filter structures having a center frequency—i.e., band-pass filters. Complainant’s claim differentiation argument is unavailing. “The doctrine of claim differentiation cannot broaden claims beyond the scope that is supported by the specification.” *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 541 (Fed. Cir. 1998) (citation omitted). Moreover, claim differentiation is most useful when the limitation in question “is the only meaningful difference between an independent and dependent claim.” *See SunRace Roots Enterprise Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003). Claim 17 of the '585 patent is an independent claim, not a claim dependent on claim 1. And while claim 6 (not referenced by Complainant) does depend from claim 1 and recites a “center frequency of said anti-aliasing filter,” claim 17, which explicitly recites an “anti-aliasing filter [] having a center frequency” has

⁶⁷ JX-1 ('585 patent) at col.4 ll.31-40, 42-45 (“The **center frequency** of anti-aliasing filter 60 and the sampling frequency of ADC 62 are selected based on the intermediate frequency of the intermediate signal. In one embodiment, both the **center frequency** of anti-aliasing filter 60 and the sampling frequency of ADC 62 are set to be at least twice the bandwidth of the intermediate frequency signal. When anti-aliasing filter 60 is constructed using transconductors as shown in Fig. 4, the **center frequency** of anti-aliasing filter 60 can be adjusted by varying the voltage of transconductors 99. . . . In the present embodiment, a tuning control circuit 67 is included for adjusting the **center frequency** of anti-aliasing filter 60 and the sampling frequency of ADC 62.”), claim 6 (“a **center frequency** of said anti-aliasing filter”), claim 17 (“said first filter function being an anti-aliasing filter and having a **center frequency**”) (emphasis added).

a nearly identical dependent claim—claim 21. In other words, the reference to the center frequency in claim 6 is clearly not the “only meaningful difference” between it and claim 1.

Finally, Complainant’s proposed construction is also improper as it describes a function for an anti-aliasing filter rather than the structure of an anti-aliasing filter without contending that “anti-aliasing filter” is a means-plus-function term.

16. “signal output circuit for receiving the digital output signals from the signal processor and for providing one or more output signals corresponding to the digital output signals”⁶⁸

Complainant’s Proposed Construction	Silicon Labs’ Proposed Construction	MaxLinear’s Proposed Construction	Staff’s Proposed Construction
a circuit that receives the digital output signals from the signal processor and provides one or more output signals corresponding to those digital output signals	a circuit that receives the digital output signals from the signal processor and provides one or more output signals corresponding to those digital output signals	<p>The term, “signal output circuit,” is properly construed under §112(f).⁶⁹</p> <p>Function: receiving the digital output signals from the signal processor and for providing one or more output signals corresponding to the digital output signals</p> <p>Corresponding structure: the circuits shown in Figure 2</p>	a circuit that receives the digital output signals from the signal processor and reformats them for output from the receiver

The MaxLinear Respondents contend that this limitation must be construed under 35 U.S.C. § 112(f). OUII disagrees. The term “signal output circuit” is generic and must be

⁶⁸ This limitation appears in claim 1 of the ’792 patent. The “signal output circuit” is referenced in dependent claim 7.

⁶⁹ If §112(f) does not apply, then “signal output circuit” is a circuit that receives multiple digital inputs and provides baseband outputs corresponding to the inputs.

understood by reference to the '792 patent specification. The '792 patent states that “processed IF signals on terminals 134 and 135 are coupled to signal output circuit 140 to be converted into the desired output signals. In accordance with the present invention, signal output circuit 140 can assume various configurations to provide output signals in different formats.”⁷⁰ Examples of those different formats are “analog TV format and digital TV format.”⁷¹ Examples of “signal output circuits” in the '792 patent include box 140 in Fig. 1 and the various circuits shown in Fig. 2.⁷² The circuit elements in those examples include digital-to-analog converters (DAC), low-pass filters (LPF), serializers, single-ended drivers, and differential output drivers.⁷³ In this manner, the digital output signals from the signal processor are reformatted by the signal output circuit to be output as either analog signals or a serialized data stream. OUII’s proposed construction is thus well-supported by the disclosure of the '792 patent.

Because “signal output circuit” is not a term of art, OUII’s proposed construction strikes the best balance of all the proposed constructions of defining the term in view of the patent’s disclosure without limiting the outputs strictly to those explicitly disclosed by the patent. Complainant and Silicon Lab’s proposed construction, in contrast, has no tether to the teaching of the '792 patent. Complainant and Silicon Lab’s proposed construction essentially states that the output of the signal output circuit must somehow relate to the input—a definition so broad as to be meaningless.

⁷⁰ JX-2 ('792 patent) at col.6 ll.49-53.

⁷¹ *Id.* at col.6 ll.56-59.

⁷² *Id.* at col.7 ll.3-7.

⁷³ *Id.* at col.7 l.3-col.9 l.15.

IV. U.S. PATENT NO. 7,075,585

A. Infringement

Complainant asserts that Respondents infringe claims 1, 2, 3, 10, and 13 and that the MaxLinear Respondents additionally infringe claim 12. All of the asserted claims depend from independent claim 1.

1. Legal Standard

Infringement must be proven by a preponderance of the evidence. *See Cross Med. Prods., Inc. v. Medtronic SofamorDanek, Inc.*, 424 F.3d 1293, 1310 (Fed. Cir.2005). “Patent infringement is a two step inquiry. First, the court must construe the asserted claim Second, the court must determine whether the accused product or process contains each limitation of the properly construed claims.” *Tessera, Inc. v. Int’l Trade Comm’n*, 646 F.3d 1357, 1364 (Fed. Cir. 2011) (citation omitted).

2. Overview

Complainant alleges that the Silicon Labs Accused Tuners contributorily infringe claims 1-3, 10, and 13 of the ’585 patent.⁷⁴ Complainant further alleges that the Accused Televisions containing the Silicon Labs Accused Tuners directly infringe the same claims.⁷⁵

Complainant alleges that the MaxLinear Accused Tuners contributorily infringe claims 1-3, 10, 12, and 13 of the ’585 patent.⁷⁶ Complainant further alleges that the Accused Televisions containing the MaxLinear Accused Tuners directly infringe the same claims.⁷⁷

⁷⁴ CPreHB at 15-16, 87.

⁷⁵ *Id.*

⁷⁶ CPreHB at 15-16, 126.

⁷⁷ *Id.*

3. Claim 1

- a. **The evidence will show that Cresta has failed to prove that the accused tuners and television incorporating them have “a tuner . . . for converting said input RF signals to intermediate signals having an intermediate frequency (IF).”**

Claim 1 of the '585 patent recites “a tuner . . . for converting said input RF signals to intermediate signals having an intermediate frequency (IF).”⁷⁸ OUII’s proposed construction of “intermediate signals” is “signals having an intermediate frequency,” and OUII’s proposed construction of “intermediate frequency” is “a carrier frequency that is different from (1) the transmission frequency of the selected input RF signal band and (2) the frequencies of the baseband signals.” *See* III.C.5, *supra*. As correctly construed by OUII and the MaxLinear Respondents, the accused tuners (and televisions containing them) lack “a carrier frequency that is different from . . . the frequencies of the baseband signals.”

(1) Silicon Labs tuners and televisions containing them

OUII expects that Complainant will fail to show that the Silicon Labs tuners and televisions containing them meet this limitation as properly construed by OUII. While Complainant's infringement argument is difficult to discern,⁷⁹ based on the argument made by its expert, Dr. Snelgrove, in connection with claim 5 of the '585 patent, Complainant appears to contend that the intermediate frequency is between 0 MHz and approximately 5 MHz. CX-

⁷⁸ JX-1 ('585 patent) at col.6 ll.53-55.

⁷⁹ The witness statement of Complainant's expert, Dr. Snelgrove, contains a very brief, two sentence discussion of how this limitation is met under the Staff's construction. CX-1843.0006. He includes inadequate support or analysis. Significantly, he fails to identify the alleged “intermediate frequencies” in Silicon Labs’ accused tuners. Further, in the Staff's opinion, Dr. Snelgrove’s statement that “[t]he IF or carrier frequency is also different from the frequency of the baseband signals, which this patent makes clear are signals that have been demodulated, because the carrier frequency has a small offset from a center frequency of zero” is unclear, unsupported by evidence, and fails to fairly apply the Staff's proposed claim construction.

1843C.0031. OUII submits that this is not a proper identification of the alleged intermediate frequency for each of a large number of Accused Silicon Labs Tuner. But taking this statement at face value, the alleged intermediate frequencies identified by Dr. Snelgrove are well within the 6 MHz channel width allocated to the baseband signals under the NTSC and ATSC broadcast standards.

OUII's view of Dr. Snelgrove's analysis with regard to OUII's proposed construction of "intermediate signal having an intermediate frequency" is supported by the testimony of Professor Bruce McNair, and Professor McNair offers further explanation for why the Accused Silicon Labs Tuners do not infringe this limitation under OUII's proposed construction. RX-1991C (McNair Rebuttal WS) at Q146-Q167 (pp.34-40).

In sum, Dr. Snelgrove's infringement analysis is not adequately supported or explained to meet Complainant's burden of proof to demonstrate infringement under OUII's proposed construction. Furthermore, Dr. Snelgrove's assertion of infringement is fully rebutted by Professor McNair's far more extensive and detailed testimony. For these reasons, the evidence will show that the Accused Silicon Labs Tuners and televisions incorporating them do not infringe the "intermediate signal having an intermediate frequency" limitation of claim 1 of the '585 patent when applying OUII's construction of that limitation.

(2) MaxLinear tuners and televisions containing them

The infringement analysis of Complainant's expert, Dr. Snelgrove, with regard to this claim element and OUII's construction of this element as applied to the Accused MaxLinear Tuners is once again brief and cryptic. *See* CX-1855C.0006-07. It appears, however, that Complainant contends that [REDACTED], *see* CX-1855C.0005, or that [REDACTED] CX-1855C.0006-07. But, even

assuming either alternative to be adequately evidenced and explained, there can be no infringement under OUII's construction. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

OUII's view of Complainant's contention regarding the "intermediate signal having an intermediate frequency" term is supported by the testimony of Dr. Hossein Hashemi, and Dr. Hashemi offers further explanation for why the Accused MaxLinear Tuners do not infringe this limitation under OUII's proposed construction. RX-1996C (Hashemi Rebuttal WS) at Q147-Q153 (pp.55-60).

In sum, Dr. Snelgrove's infringement analysis is not adequately supported or explained to meet Complainant's burden of proof to demonstrate infringement under OUII's proposed construction. Furthermore, Dr. Snelgrove's assertion of infringement is fully rebutted by Dr. Hashemi's far more extensive and detailed testimony. For these reasons, the evidence will show that the Accused MaxLinear Tuners and televisions incorporating them do not infringe the "intermediate signals having an intermediate frequency" limitation of claim 1 of the '585 patent when applying OUII's proper construction of that limitation.

b. The evidence will show that Cresta has failed to prove that the accused tuners and televisions incorporating them have "an anti-aliasing filter."

Claim 1 of the '585 patent recites "an anti-aliasing filter for filtering said intermediate signals."⁸⁰ OUII's proposed construction of "anti-aliasing filter" is "band-pass filter." *See*

⁸⁰ JX-1 ('585 patent) at col.6 ll.61-62.


III.C.15, *supra*. The accused tuners lack a “band-pass filter” that filters the intermediate signals prior to sampling by the analog-to-digital converter.

(1) Silicon Labs tuners and televisions containing them

Complainant does not argue and its expert, Dr. Snelgrove, does not claim that the Accused Silicon Lab Tuners infringe the “anti-aliasing filter” limitation under OUII’s construction of that term. CX-1843C.0009-10. The only alleged anti-aliasing filters identified by Dr. Snelgrove are low-pass filters. *Id.* For these reasons, the evidence will show that the Accused Silicon Labs Tuners and televisions incorporating them do not infringe the “anti-aliasing filter” limitation of claim 1 of the ’585 patent when applying OUII’s proper construction of that limitation.

(2) MaxLinear tuners and televisions containing them

Additionally, Dr. Snelgrove does not claim that the Accused MaxLinear Tuners infringe the “anti-aliasing filter” limitation under OUII’s construction of that term. CX-1855C.0009-10.

. *Id.* For these reasons, the evidence will show that the Accused MaxLinear Tuners and televisions incorporating them do not infringe the “anti-aliasing filter” limitation of claim 1 of the ’585 patent when applying OUII’s construction of that limitation.

4. Claims 2, 3, 10, 12, and 13

Because claims 2, 3, 10, 12, and 13 each depend from claim 1, the evidence will show that they are not infringed for the same reasons discussed above with respect to claim 1.

B. Domestic Industry – “Technical Prong”

1. Legal Standard

To satisfy the technical prong of the domestic industry requirement, the complainant must demonstrate “that it is practicing or exploiting the patents at issue.” *Certain Abrasive*

Prods. Made Using a Process for Making Powder Preforms, and Prods. Containing Same, Inv. No. 337-TA-449, Initial Determination at 35 (Feb. 8, 2002). The standard for making this determination is the same as that for demonstrating infringement. *Id.* at 36.

2. Discussion

The portion of Complainant's Prehearing Brief directed to the technical prong of the domestic industry requirement for the '585 patent identifies the "Domestic Industry Products" as Cresta's XC5000A series, XC5000C series, CTC70x series, and CTC71x series tuners. CPreHB at 178. Dr. Snelgrove also identifies the same list as the "Domestic Industry Products" in his witness statement. CX-1705C (Snelgrove WS) at Q154. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

The reason for this statement is explained by examining the chart entry with regard to the final "a plurality of demodulators" limitation of claim 1 of the '585 patent. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] . [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Thus, Dr. Snelgrove has failed to offer credible evidence that even this single instance of a technical domestic industry product is configured as alleged in the United States.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Thus, the evidence will not establish the technical prong of domestic industry under Respondents’ and Staff’s proposed construction of “anti-alias filter.” Finally, the chart does not reference the exhibit numbers on Complainant’s exhibit list and many of the referenced Bates ranges do not appear to correspond to any exhibit on Complainant’s exhibit list.

For at least these reasons, the evidence will show that Complainant has failed to meet it

burden of proof for the technical prong of the domestic industry requirement with respect to the '585 patent.

C. Validity

1. Legal Standards for Anticipation and Obviousness

Invalidity of a patent must be proven by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, 131 S. Ct. 2238, 2242 (2011). Patents are presumed to be valid and enforceable. 35 U.S.C. § 282. However, “[t]he patent law imposes certain fundamental conditions for patentability, paramount among them being the condition that what is sought to be patented, as determined by the claims, be new.” *Titanium Metals Corp. of Am. v. Banner*, 778 F.2d 775, 780 (Fed. Cir. 1985). A patent claim is invalid as anticipated by prior art under Section 102 if “each and every limitation is found either expressly or inherently in a single prior art reference.” *Celeritas Techs., Ltd. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1360 (Fed. Cir. 1998). Although the language may differ, the substance of what is disclosed in the prior art reference must be exactly the same as what is in the patent claim. *Titanium Metals*, 778 F.2d at 780. Anticipation is a question of fact, *see Zenith Elecs. Corp. v. PDI Comm’n Sys., Inc.*, 522 F.3d 1348, 1356-57 (Fed. Cir. 2008), which must be proven “by clear and convincing evidence.” *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1327 (Fed. Cir. 2008).

In addition to the novelty requirement in Section 102, “[u]nder the U.S. Patent Act, an invention cannot be patented if ‘the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *Proctor & Gamble Co. v. Teva Pharma. USA, Inc.*, 566 F.3d 989, 994 (Fed. Cir. 2009) (quoting 35 U.S.C. § 103(a)). Obviousness is a question of law based on underlying facts that must be proven by clear and convincing evidence by the party seeking to invalidate the

patent. *Id.* An obviousness analysis includes the scope and content of the prior art, differences between the prior art and the claims at issue, the level of ordinary skill in the pertinent art, and any secondary considerations of non-obviousness, such as commercial success, long felt but unsolved needs, failure of others, *etc.* *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 399 (2007).

2. Asserted Claims of the ’585 Patent are Invalid

The evidence will show that claims 1 and 2 of the ’585 patent are invalid as anticipated and that claims 3, 10, 12, and 13 of the ’585 patent are invalid as obvious.

a. Claim 1

The evidence will show that claim 1 of the ’585 patent is invalid as anticipated by EP Patent Application No. 966,854 (“Boie”).⁸¹ Boie is prior art to the ’585 patent under 35 U.S.C. § 102(a) and (b). All elements are disclosed under all proposed constructions unless otherwise noted.

Boie discloses “a receiver” because it describes a satellite television receiver. *See, e.g.*, RX-10 at “Background,” col.1 ll.3-6, ll.55-56; RX-1677C at Q240-241.

Boie discloses “a tuner for receiving RF signals and for converting said input RF signals to intermediate signals having an intermediate frequency (IF), said input RF signals encoding information in one of a plurality of formats.” Boie discloses a multi-standard tuner that receives RF signal inputs, that may be analog or digital and use different modulations, from the outdoor unit and converts those signals to two successive intermediate signals. *See, e.g.*, RX-10 at col.1 l.40-col.2 l.19, claim 1; RX-1677C at Q242-258.

Boie discloses the claimed channel filter comprising the following elements.

⁸¹ RX-10.

Boie discloses “an anti-aliasing filter for filtering said intermediate signals.” Boies discloses that the 140 MHz IF signal is passed through saw filter 1 (a band-pass filter), downconverted to a further 75 MHz IF, and passed through band-pass filter 5. Boies discloses that the analog-to-digital converter does not experience aliasing problems because of the bandlimited input signal. *See, e.g.*, RX-10 at col.2 l.30-col.3 l.11, Figs. 1, 2; RX-1677C at Q259-267.

Boie discloses “an analog-to-digital converter for sampling said filtered intermediate signals and generating a digital representation thereof.” Boie discloses that the band-pass filtered IF signals are sampled to by an analog-to-digital converter to produce a digital representation of the signal. *See, e.g.*, RX-10 at col.1 ll.22-27, col.2 l.57-col.3 l.16, Fig. 1; RX-1677C at Q268-271.

Boie discloses “a signal processor for processing said digital representation of said intermediate signals in accordance with said format of said input RF signal, said signal processor generating digital output signals indicative of information encoded in said input RF signal.” Boie discloses that the output of the analog-to-digital converter is fed to adaptively controlled bandpass filter 8 which applies a filter to minimize any adjacent channel signals in accordance with an input representing the applicable television standard. *See, e.g.*, RX-10 at col.3 ll.16-19, Figs. 1, 2; RX-1677C at Q272-276. The adaptive filter would satisfy all claim constructions except those requiring a digital signal processor. The evidence will show it would be obvious to one of ordinary skill to modify Boie to use a digital signal processor for the adaptive filtering because the application of filter functions is one of the primary roles for a digital signal processor.

Boie discloses “a plurality of demodulators, each coupled to receive outputs signals from said signal processor, each of said demodulators for demodulating said digital output signals according to one of said formats of said input RF signal, each of said demodulators generating video and audio baseband signals corresponding to said format of said input RF signal.” Boie discloses an FM demodulator 9 for analog signals and a QPSK demodulators 12 and 13 for digital signals, each generating video and audio baseband signals. *See, e.g.*, RX-10 at col.1 ll.8-10, col.2 ll.30-44, col.3 ll.19-25, Fig. 1; RX-1677C at Q277-281.

b. Claim 2

The evidence will show that claim 1 of the '585 patent is invalid as anticipated by Boie. Boie discloses that input formats include analog and digital formats. *See, e.g.*, RX-10 at col.1 ll.8-10, 42-43, col.2 ll.30-44, col.3 ll.19-25, Fig. 1; RX-1677C at Q282-Q283.

c. Claim 3

The evidence will show that claim 3 of the '585 patent is invalid as obvious over Boie in view of the knowledge of one of ordinary skill in the art. It would be obvious to adapt the Boie to add a digital-to-analog converter after the output of the adaptive filter in order to allow use of industry-standard analog input demodulators. RX-1677C at Q284-Q292.

d. Claim 10

The evidence will show that claim 10 of the '585 patent is invalid as obvious over Boie in view of U.S. Patent 6,643,502 (“VDP”), RX-30, because VDP teaches that the adaptive filtering in Boie could be accomplished with improved effect using a plurality of finite impulse response filters adapted to the input signal formats and applied by a signal processor. *See, e.g.*, RX-1677C at Q297. VDP qualifies as prior art to the '585 and '792 patents under 35 U.S.C. §102(e).

e. Claim 12

The evidence will show that claim 12 of the '585 patent is invalid as obvious over Boie in view of VDP further in view of U.S. Patent 5,388,062 ("Knutson"), RX-76, because in addition to the teachings of Boie and VDP, Knutson explicitly teaches separation of finite impulse response filter operation into two parts—each handled by a separate computing unite. *See, e.g.*, RX-1677C at Q305-Q306; RX-76 at col.2 l.29-col.6 l.20, Figs. 1-3.

f. Claim 13

The evidence will show that claim 13 of the '585 patent is invalid as obvious over Boie in view of VDP because a person of ordinary skill in the art pursuing the combination described above with regard to claim 10 would keep the television standard input of Boie when adapting the adaptive filter to use finite impulse responses, in order to keep the filtering responsive to the input format as already suggested by claim 10. *See, e.g.*, RX-1677C at Q307-Q308.

V. U.S. PATENT NO. 7,265,792

A. Infringement

1. Overview

Complainant alleges that the Silicon Labs Accused Tuners directly infringe claims 1-4, 7, and 26 of the '792 patent and that they contributorily infringe claim 8 of the '792 patent.⁸² Complainant further alleges that the Accused Televisions containing the Silicon Labs Accused Tuners directly infringe the same claims 1-4, 7, 8, and 26.⁸³

Complainant alleges that the MaxLinear Accused Tuners directly infringe claims 1-3, 7, 25, and 26 of the '792 patent and that they contributorily infringe claim 8 of the '792 patent.⁸⁴

⁸² CPreHB at 15-16, 300-315.

⁸³ *Id.*

⁸⁴ CPreHB at 15-16, 315-326.

Complainant further alleges that the Accused Televisions containing the MaxLinear Accused Tuners directly infringe claims 1-3, 7, 8, 25, and 26.⁸⁵

2. Claim 1

- a. The evidence will show that Cresta has failed to prove that the accused tuners and television incorporating them have “a frequency conversion circuit . . . for converting the input RF signal to an intermediate frequency signal having an intermediate frequency (IF).”**

Claim 1 of the '792 patent recites “a frequency conversion circuit . . . for converting said the input RF signal to an intermediate frequency signal having an intermediate frequency (IF).”⁸⁶ OUII’s proposed construction of “intermediate frequency signal” is “signal having an intermediate frequency,” and OUII’s proposed construction of “intermediate frequency” is “a carrier frequency that is different from (1) the transmission frequency of the selected input RF signal band and (2) the frequencies of the baseband signals.” *See* III.C.5, *supra*. As correctly construed by OUII and the MaxLinear Respondents, the accused tuners lack “a carrier frequency that is different from . . . the frequencies of the baseband signals.”

(1) Silicon Labs tuners and televisions containing them

The infringement analysis of Complainant’s expert, Dr. Snelgrove, with regard to this claim element and OUII’s construction of this element as applied to the Accused Silicon Labs Tuners is identical to that offered with regard to the similar claim limitation of claim 1 of the '585 patent. *Compare* CX-1843.0006 to CX-1849.0006. In fact, Dr. Snelgrove’s analysis of the entire “frequency conversion circuit” limitation of claim 1 of the '792 patent is very nearly identical to his analysis of the “tuner” limitation of claim 1 of the '585 patent. *Compare* CX-

⁸⁵ *Id.*

⁸⁶ JX-2 ('792 patent) at col.10 ll.52-55.

1843.0002-09 to CX-1849.0002-08. Complainants' Prehearing Brief also states that the "frequency conversion circuit" limitation "is present in the Silicon Labs Accused Products for the same reasons that 'a tuner' limitation is present in claim 1 of the '585 patent." CPreHB at 301. Therefore, for the same reasons discussed above in section IV.A.3.a.(1),⁸⁷ the evidence will show that the Accused Silicon Labs Tuners and televisions incorporating them do not infringe the "intermediate frequency signal having an intermediate frequency" limitation of claim 1 of the '792 patent when applying OUII's construction of that limitation.

(2) MaxLinear tuners and televisions containing them

The infringement analysis of Complainant's expert, Dr. Snelgrove, with regard to this claim element and OUII's construction of this element as applied to the Accused MaxLinear Tuners is identical to that offered with regard to the similar claim limitation of claim 1 of the '585 patent. *Compare* CX-1855C.0006-07 to CX-1859C.0006-07. In fact, Dr. Snelgrove's analysis of the entire "frequency conversion circuit" limitation of claim 1 of the '792 patent is very nearly identical to his analysis of the "tuner" limitation of claim 1 of the '585 patent. *Compare* CX-1843C.0002-09 to CX-1859C.0002-09. Complainant's Prehearing Brief also states that the "frequency conversion circuit" limitation "is present in the MaxLinear Accused Products for the same reasons that the 'tuner' limitation is present in claim 1 of the '585 patent." CPreHB at 315. Therefore, for the same reasons discussed above in section IV.A.3.a.(2), the evidence will show that the Accused MaxLinear Tuners and televisions incorporating them do not infringe the "intermediate frequency signals having an intermediate frequency" limitation of claim 1 of the '792 patent when applying OUII's construction of that limitation.

⁸⁷ See also RX-1991C (McNair Rebuttal WS) at Q467-Q468 (p.108).

3. Claims 2-4, 7, 8, 25, and 26

Because claims 2-4, 7, 8, 25, and 26 each depend from claim 1, the evidence will show that they are not infringed for the same reasons discussed above with respect to claim 1.

B. Domestic Industry – “Technical Prong”

With regard to the “intermediate frequency” limitation of claim 1 of the ’792 patent, the chart prepared by Dr. Snelgrove in support of his testimony and attached as an exhibit to his witness statement, states only that the [REDACTED] [REDACTED]” CX-1842C.0003. This statement is insufficient to establish that the DI Tuner Products practice the “intermediate frequency” limitation of claim 1 of the ’792 patent under OUII’s construction of that term.

As with the ’585 patent chart for technical domestic industry, the ’792 patent chart does not reference the exhibit numbers on Complainant’s exhibit list, and many of the referenced Bates ranges do not correspond to any exhibit on Complainant’s exhibit list. CX-1842C.

For at least these reasons, at this time OUII expects the evidence will show that Complainant has failed to meet its burden of proof for the technical prong of the domestic industry requirement with respect to the ’792 patent.

C. Validity

The evidence will show that the asserted claims of the ’792 patent are invalid as anticipated and/or obvious in view of VDP and combinations thereof. See RPreHB at 404-20; RX-1677C at Q496-Q567; RX-30.

VI. ECONOMIC DOMESTIC INDUSTRY

A. Legal Standard

Under Section 337, the Commission has the authority to ban the importation into the United States of articles that infringe a valid and enforceable patent only if “an industry in the

United States, relating to the articles protected by the patent . . . exists or is in the process of being established.” 19 U.S.C. §1337(a)(2). In patent based proceedings under Section 337, a complainant bears the burden of proof with respect to this issue. *See, e.g., Certain Methods of Making Carbonated Candy Products*, Inv. No. 337-TA-292, Comm’n Op. at 34-35, USITC Pub. 2390 (June 1991).

The domestic industry requirement consists of both an economic prong (i.e., there must be an industry in the United States) and a technical prong (i.e., that industry must relate to articles protected by the patent at issue). *See Certain Ammonium Octamolybdate Isomers*, Inv. No. 337-TA-477, Comm’n Op. at 55, USITC Pub. 3668 (Jan. 2004). The economic prong of the domestic industry requirement is defined in subsection 337(a)(3) as follows:

- (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark or mask work concerned -
 - (A) Significant investment in plant and equipment;
 - (B) Significant employment of labor or capital; or
 - (C) Substantial investment in its exploitation, including engineering, research and development, or licensing.

The satisfaction of any one of these criteria will satisfy the economic prong. *Certain Integrated Circuits, Chipsets, and Products Containing Same Including Televisions*, Inv. No. 337-TA-786, Comm’n Op. at 23, USITC Pub. 4406 (July 2013).

In analyzing the economic prong, the Commission examines whether the domestic activities and investments are “important to the articles protected by the asserted patents in the context of the company’s operations, the marketplace, or the industry” *Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Comm’n Op. at 30, USITC Pub. 4289 (Nov. 2011). The inquiry also considers whether “the complainant’s undertakings had a direct bearing on the practice of the patent.” *Id.* Although there is no

requirement that the domestic industry be of any particular size, complainant's domestic and foreign activities may be compared to determine whether the domestic contributions added value to a product covered by the asserted patents. *See, e.g., id.* at 27.

In general, "the appropriate date for determining whether a domestic industry exists or is in the process of being established is the date of filing of the complaint."⁸⁸ *Certain Video Game Systems and Controllers*, Inv. No. 337-TA-743, Comm'n Op. at 5, USITC Pub. 4377 (Feb. 2013) (hereinafter, "Video Game Systems"). "However, in appropriate situations based on the specific facts and circumstances of an investigation, the Commission may consider activities and investments beyond the filing of the complaint." *Id.* at 5-6 (suggesting one such appropriate situation occurs when "there is evidence that a complainant's domestic industry is dwindling"); *see also Certain Semiconductor Integrated Circuits and Products Containing Same*, Inv. No. 337-TA-665, Order No. 21 at Section IV, (Apr. 16, 2009). Analysis of the economic prong of domestic industry is "fact specific" necessitating application of a "flexible, case specific methodology." *Certain Integrated Circuit Chips and Products Containing the Same*, Inv. No. 337-TA-859, Order No. 34 (Dec. 6, 2013).

B. Background

[REDACTED]

[REDACTED]

[REDACTED]

⁸⁸ When an amended complaint is filed, the Commission has looked to the date that the amendment was filed when assessing whether a domestic industry exists. *Certain Electronic Imaging Devices*, Inv. No. 337-TA-726, ID/Order No. 18 at 8-16 (Feb. 7, 2011) (Commission Notice Not to Review, Mar. 8, 2011).

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

[REDACTED] [REDACTED]

⁹⁷ RX-1684C (Murgulescu V1) at 44:8-23, 154:3-155:8; RX-1685C (Lewis V1) at 94:7-10, 288:6-25; RX-1342C.

⁹⁹ RX-1313C; RX-1367C.

¹⁰¹ RX-0780C.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁰³ Complainant's attempt to introduce testimony regarding events occurring after the close of fact discovery and to rely on documents produced long after the close of fact discovery is improper. *See* CX-1706C (Lewis WS) at Q78-81; CX-1251C (produced Sept. 17, 2014); CX-1373C & CX-1374C (produced Sept. 23, 2014).

¹⁰⁴ CPreHB at 426.

¹⁰⁵ RX-1694C (Lewis V2) at 453:4-8.

¹⁰⁶ RX-1689C (Zien) at 107:7-14; CX-1706C (Lewis WS) at Q22, Q24; CX-1710C (Murgulescu WS) at Q23, Q25.

¹⁰⁷ RX-1689C (Zien) at 90:19-92:10, 107:7-108:18.

¹⁰⁸ *See* CPreHB at 444.

¹⁰⁹ *Id.*

[illegible]¹¹¹ RX-1685C (Lewis V1) at 91:1-5.

¹¹³ RX-1535.

¹¹⁵ RX-1271C; RX-1685C (Lewis V1) at 30:22-24, 40:8-41:8, 49:6-23, 165:12-14; RX-1695C (Bose) at 123:10-24.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]. *See Certain Stringed Musical Instruments and Components Thereof*, Inv. No. 337-TA-586, Comm’n Op. at 16, USITC Pub. 4120 (Dec. 2009). [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

C. Discussion

The analysis of issues and facts relevant to the economic prong of the domestic industry requirement in context can present complex questions. But one aspect of the analysis remains relatively straightforward—the alleged domestic industry must “exist[]” in the present. *See* 19 U.S.C. § 1337(a)(3). As noted above, the economic domestic industry determination is generally made as of the time of the filing of a complaint, but the circumstances of an individual investigation may require looking past the time of the complaint. OUII believes this rule to effectively operate as a presumption in a complainant’s favor. In other words, the domestic industry is presumed to continue on past the filing of the complaint absent evidence to the

contrary. In OUII's view, [REDACTED]

[REDACTED]

This investigation requires examination of the facts beyond the filing of the Complaint.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] For these reasons, OUII believes that the Initial Determination should include a finding of no economic domestic industry.

VII. REMEDY, BONDING, AND PUBLIC INTEREST

A. Public Interest

The statutory public interest factors do not weigh against the issuance of relief as to the Respondents in this investigation if a violation of Section 337 were to be found. In regards to all Respondents, the evidence supports (1) some delay in the effective date of an LEO to lessen the impact on third-party content providers and to ensure an adequate supply of alternative products to meet consumer demand and (2) some tailoring to allow for repair and warranty replacement to lessen the impact on consumers who currently own Accused Products.

The statutory public interest considerations fall into four categories: effect of exclusion upon (1) public health and welfare, (2) competitive conditions in the U.S. economy, (3) U.S.

production of articles that are like or directly competitive with those that are the subject of the investigation, and (4) U.S. consumers. 19 U.S.C. § 1337(d)(1); *see also Certain Abrasive Products*, Inv. No. 337-TA-449, Comm’n Op. at 8, USITC Pub. 3530 (Aug. 2002). Historically, the Commission has interpreted the legislative history of section 337 to mean that exclusionary relief should only be denied when the adverse effect on the public interest factors would be greater than the interest in protecting the patent holder. *Certain Battery-Powered Ride-On Toy Vehicles and Components Thereof*, Inv. No. 337TA-314, Comm’n Op. at 11 (Apr. 9, 1991).

There have been few instances when public interest considerations have prevented the Commission from issuing any remedy. *See, e.g., Certain Automatic Crankpin Grinders*, Inv. No. 337-TA-60, Comm’n Det. & Order at 2, USITC Pub. No. 1022 (1979) (overriding national policy in increasing supply of fuel-efficient automobiles; domestic industry unable to supply U.S. demand); *Certain Inclined Field Acceleration Tubes*, Inv. No. 337-TA-67, Comm’n Op. at 21-31, USITC Pub. No. 1119 (1980) (overriding public interest in continuing basic atomic research with imported acceleration tubes deemed to be of higher quality than domestic product); *Certain Fluidized Supporting Apparatus*, Inv. No. 337-TA-182/188, Comm’n Op. at 23-25, USITC Pub. No. 1667 (1984) (relief denied where no comparable substitutes available; domestic producer could not meet demand for hospital beds for burn patients). In these few instances in which public interest concerns have led to the outright denial of relief by the Commission after a violation of section 337 has been found, a key consideration was the complainant’s inability to meet consumer demand if the respondent’s products were excluded. Here, while Complainant admittedly cannot meet consumer demand for devices that it does not manufacture, there is no evidence that U.S. demand for the accused products could not be met, over time, by other companies that are not Respondents in this investigation. Moreover, the public interest favors

the protection of U.S. intellectual property rights by excluding infringing imports. *Certain Two-Handle Centerset Faucets and Escutcheons, and Components Thereof*, Inv. No. 337-TA-422, Comm'n Op. at 9, USITC Pub. No. 3332 (Jul. 2000).

1. Effects on the Public Health and Welfare

The evidence is not expected to show that the effects of remedial orders on the public health and welfare would support a recommendation to the Commission against the issuance of any exclusion order. The Respondents argue that imposing an exclusion order in this investigation would have detrimental effects on the public health and welfare because: (1) at least some Samsung Accused Products offer voice guide features helpful to customers with visual impairments or disabilities; and (2) the Accused Products represent a significant portion of the most environmentally-friendly televisions available (e.g., 42% of Energy Star certified models).¹¹⁶ However, there are Energy Star certified televisions available on the market from non-respondents that would not be subject to an LEO, including models from manufacturers such as Emerson, Sanyo, Sony, and Toshiba.¹¹⁷ Similarly, non-respondent television manufacturers offer television models with voice command capabilities.¹¹⁸ In addition, at least some of the televisions manufactured by the Respondent television manufacturers do not incorporate accused tuners.¹¹⁹ Respondents' arguments are at their root simply arguments that remedial orders would reduce the choices available to consumers. Thus, the evidence does not show that the public

¹¹⁶ RX-1676C (Vander Veen WS) at Q172-179.

¹¹⁷ CX-1896C (Button Rebuttal WS) at Q65.

¹¹⁸ *Id.* at Q67.

¹¹⁹ RX-1676C (Vander Veen WS) at Q32.

health and welfare would suffer any significant adverse impact if remedial orders issued in this investigation.

2. Effects on Competitive Conditions in the U.S. Economy

Should an LEO issue against the accused products in this investigation, competitive conditions in the United States are likely to change. For 2013, Respondents' products (the vast majority of which are Accused Products) represented a forty-eight percent share by unit volume of the U.S. flat panel television market and a sixty-six percent share of the market as measured by sales.¹²⁰ However, there is no evidence to suggest that any change in competitive conditions due to an LEO will necessarily be permanent (e.g., force a Respondent to permanently exit from the U.S. market), or otherwise significant enough to recommend against issuance of a remedy in this investigation.

The Respondents raise arguments that have previously been rejected by the Commission as demonstrating an adverse impact on competitive conditions in the U.S. economy. For example, Respondents argue that over-the-top content providers would be negatively impacted through decreased sales of smart televisions capable of acting as distribution channels.¹²¹ In this regard, however, the temporary economic impacts of an LEO on companies in a particular market segment (e.g., content providers) does not demonstrate that there will necessarily be a significant adverse impact on competitive conditions in the U.S. economy. *See Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, USITC Pub. No. 4331, Comm'n Op. at 69 (June 2012) ("*Personal Data/Mobile Communications Devices*"). Indeed, the protection of intellectual property rights can have a pro-competitive

¹²⁰ JX-032C; RX-1565C.

¹²¹ RX-1676C (Vander Veen WS) at Q115-119.

effect on market conditions. *Certain Two-Handle Centerset Faucets and Escutcheons, and Components Thereof*, Inv. No. 337-TA-422, Comm'n Op. at 9, USITC Pub. No. 3332 (Jul. 2000). There are suitable alternatives to the Accused Products of Respondents, so the evidence will not show that an LEO will have a materially adverse long-term impact on competitive conditions in the U.S. economy.

While the Accused Products are part of a robust and competitive consumer product market segment, it is unlikely that even strongly motivated non-respondent manufacturers and their supply chains could move to replace such a significant volume of product sales overnight, particularly in light of the fact that the accused tuners represent about seventy percent of the silicon tuners (15.9 million) incorporated in televisions sold in the United States in 2013.¹²² This evidence is sufficient to justify a delay in imposition of remedial orders as to the Respondents in order to avoid a disproportionately severe short term impact on competitive conditions while television manufacturers, both Respondents and non-respondents, and their supply chains move to respond to the impact of an LEO.

3. U.S. production of articles that are like or directly competitive with those that are the subject of the investigation

Complainant argues that one non-respondent domestic television manufacturer, [REDACTED] [REDACTED] could benefit from a larger market share as a result of remedial orders entered in this investigation.¹²³ [REDACTED]

[REDACTED]

[REDACTED] Also, while Complainant has argued that [REDACTED]

¹²² See RX-1676C (Vander Veen WS) at Q69-104.

¹²³ CX-1896C (Button WS) at Q161.

¹²⁴ *Id.* at Q163.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].¹²⁵ In contrast, Respondents argue that remedial orders would have little impact on domestic production of like and competitive products.¹²⁶ It is OUII's belief Complainant's arguments are speculative and without an adequate evidentiary foundation. OUII therefore believes that this factor is entitled to little or no weight in the public interest determination.

4. Impact on U.S. Consumers

In OUII's view, the evidence does not show that an LEO would adversely impact U.S. consumers to a degree to which the ALJ should recommend against issuing an exclusion order in this investigation. The Respondents appear to argue that an LEO will result in higher prices and less choice. Both statements may be true in the short term. However, OUII is of the view that the policy supporting the protection of valid intellectual property rights must be balanced against the consumers' interests in lower prices and greater choice when those advantages are based on unlawfully infringing products. Additionally, imposition of the remedial order can be delayed to ameliorate the harmful effect on U.S. consumers.

Respondents raise an additional argument that an LEO may render warranty, repair and replacement parts unavailable, which would adversely impact relationships with their customers. In response to similar concerns regarding an LEO directed to certain types of smartphones the Commission tailored the remedy to address these types of concerns. *See Personal Data/Mobile*

¹²⁵ *Id.*

¹²⁶ RX-1676C at Q146-153.

Communications Devices. These impacts can be mitigated by allowing for the importation of certain repair and replacement parts. The ALJ can recommend that the Commission consider similar tailoring of any LEO in this investigation.

B. Exclusion Order

OUII does not expect Complainant to prove that Respondents have violated Section 337 through the importation and sale in the United States of the Accused Products. However, should a violation be found, OUII agrees with Complainant that a limited exclusion order (“LEO”) directed to all of Respondents’ infringing television sets, television receivers, television tuners, and components thereof should be recommended by the ALJ.

In OUII’s view, the EPROMs factors should not be applied in this investigation to determine whether an LEO should issue against the Respondents’ Accused Products. The so-called EPROMs factors, which are nonexclusive include: (1) the value of the infringing articles compared to the value of the downstream products in which they are incorporated, (2) the identity of the manufacturer of the downstream products, (3) the incremental value to the complainant of the exclusion of downstream products, (4) the incremental detriment to respondents of exclusion of such products, (5) the burdens imposed on third parties resulting from exclusion of downstream products, (6) the availability of alternative downstream products that do not contain the infringing articles, (7) the likelihood that the downstream products actually contain the infringing articles and are thereby subject to exclusion, (8) the opportunity for evasion of an exclusion order that does not include downstream products, and (9) the enforceability of an order by Customs. *Certain Erasable Programmable Read Only Memories*, Inv. No. 337-TA-276, USITC Pub. No. 2196 (May 1989) (“EPROMs”), *aff’d sub nom. Hyundai Elec. Indus. CO. v. U.S. Int ’l Trade Comm ’n*, 899 F.2d 1204 (Fed. Cir. 1990). These factors

were historically applied to determine whether an LEO should be applied to downstream products of non-respondents. Here, however, there are no “downstream products” at issue, as television sets are accused products within the scope of the Notice of Institution and the manufacturers are named Respondents, and no EPROMs analysis is required.

The public interest considerations have also been delegated to the ALJ in this investigation. However, as discussed above, the evidence with regard to these considerations does not counsel against the issuance of any remedy. Some tailoring of an LEO in response to public interest considerations, such as delaying entry by some months and allowing limited importation for warranty repairs on products already purchased by customers, is warranted. *See Certain Systems for Detecting and Removing Viruses or Worms*, Inv. No. 337-TA-510, Comm’n Op’n on Remedy, the Public Interest, and Bonding, 2007 WL 4788663, at *15 (Aug. 23, 2005); *Certain Liquid Crystal Display Devices*, Inv. No. 337-TA-631, Comm’n Op. at 27 (June 24, 2009) (allowing exemption to LEO for service and replacement parts); *Certain Liquid Crystal Display Modules*, Inv. No. 337-TA-634, Comm’n Op. at 8 (Nov. 9, 2009) (allowing exemption for service and replacement parts); *Certain Personal Data and Mobile Communications Devices and Related Software*, Inv. No. 337-TA-710, Comm’n Op. at 74, USITC Pub. No. 4331 (June 2012) (delaying entry of an LEO directed to smartphones to address concerns about the impact on wireless carriers). The delay in entry of an LEO as to all Respondents is justified in light of a lack of strong evidence that U.S. demand for the Accused Products can be met by other companies who are not respondents in this investigation.

C. Cease and Desist Order(s)

Under Commission precedent, “cease and desist orders are warranted with respect to domestic respondents that maintain commercially significant U.S. inventories of the infringing

product.” *Certain Agricultural Tractors Under 50 Power Take-off Horsepower*, Inv. No.337-TA-380, Comm’n Op’n at 31, USITC Pub. 3026 (March 1997). “[T]here is no lower limit on the number of articles a domestic respondent must have in inventory before that inventory can be found ‘commercially significant.’ Each case must be decided on its own facts” *Certain Agricultural Vehicles and Components Thereof*, Inv. No. 337-TA-487, Comm’n Op’n on Remedy at 14, (Sept. 24, 2004).

Complainant relies solely upon the import and inventory stipulations it has entered with each respondent to demonstrate the existence of commercially significant inventories of the Accused Products. CPreB at 475 n.1140. Respondents argue that Complainant has failed to contend that Respondents’ inventories are commercially significant. RPreB at 594. Inventory numbers alone are insufficient to meet Complainant’s burden to establish that those numbers are commercially significant. *See Certain Wireless Consumer Electronics Devices and Components Thereof*, Inv. No. 337-TA-853, I.D., 2013 WL 5821012 at *208 (Sept. 6, 2013) (“[W]hile th[e] stipulations may include facts regarding amounts of inventories for certain Respondents, Complainants have failed to provide any explanation or to adduce any facts to show that the listed inventories are commercially significant.”). It is thus OUII’s view that the evidence will not be sufficient to recommend cease and desist orders. OUII further notes that [REDACTED]

[REDACTED]

In the event that the ALJ determines to recommend issuance of cease and desist orders, OUII believes the cease and desist orders should be tailored in accordance with any tailoring of an LEO arising out of consideration of the public interest factors.

D. Bonding

The Commission typically sets the Presidential review period bond based on the price differential between the imported or infringing product and the domestic industry products, or based on a reasonable royalty. *See Certain Plastic Encapsulated Integrated Circuits*, Inv. No.337-TA-315, Comm’n Op’n on Issues Under Review and on Remedy, the Public Interest, and Bonding, at 45, USITC Pub. 2574 (Nov. 1992) (setting the bond based on a reasonable royalty).

Complainant for a bond rate for Silicon Labs and MaxLinear products based upon price differential. CPreHB at 490-91. Complainant argues for an average sales price of its products of [REDACTED], but without explanation of how it arrived at that value. *Id.* Respondents argue that Complainant improperly includes the sales price [REDACTED] in its calculation and states that the average sale price of the [REDACTED] should be used for comparison. RPreHB at 596-98. In OUII’s view, the Respondents are correct that Complainant has not provided sufficient justification to include the sales price of products that have both lower sales volumes and have been designated as end-of-life. The maximum appropriate bond rate is thus [REDACTED] for MaxLinear and 0.5% for Silicon Labs.

Complainant argues that a 100% bond is appropriate for Respondents accused televisions without supporting evidence. CPreHB at 492. In OUII’s view, Complainant has not met its burden of proving an appropriate bond amount. In the absence of evidence regarding the appropriate bond, no bond should be required. *See, e.g., Certain Printing and Imaging Devices*, Inv. No. 337-TA-690, ID at 456 (Sept. 23, 2010) (adopted by Commission as to bond determination, Comm’n Op. at 35 (Feb. 17, 2011)).

VIII. CONCLUSION

For the foregoing reasons, the evidence shows that a violation of Section 337 has not occurred.

Respectfully Submitted,

/s/ Peter J. Sawert

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November 10, 2014

**Certain Television Sets, Television
Receivers, Television Tuners, and
Components Thereof**

Investigation No. 337-TA-910

CERTIFICATE OF SERVICE

The undersigned certifies that on November 10, 2014, he caused the foregoing **PRE-TRIAL BRIEF OF THE COMMISSION INVESTIGATIVE STAFF** to be served by hand upon Administrative Law Judge Dee Lord (2 copies) and served upon the parties (1 copy each) in the manner indicated below:

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